Carbohydrate Research, 239 (1993) C9–C11
Elsevier Science Publishers B.V., Amsterdam

CONTENTS

Solution conformation of methyl β-xylobioside from optical rotation
E.S. Stevens (Binghamton, NY, USA), S. Bystricky and J. Hirsch (Bratislava, Czechoslovakia) 1

Oligosaccharide microscale analysis by circular dichroic spectroscopy: Reference spectra for chromophoric D-fructofuranoside derivatives
N. Ikemoto, L.-C. Lo, O.K. Kim, N. Berova and K. Nakanishi (New York, NY, USA) . . . 11

An improved approach to the analysis of the structure of small oligosaccharides of glycoproteins: application to the *O*-linked oligosaccharides from human glycophorin A
H. Krotkiewski, E. Lisowska (Wroclaw, Poland), G. Nilsson, G. Grönberg and B. Nilsson (Lund, Sweden) 35

Overlapping anomeric effects in a sucrose analogue
A.D. French (New Orleans, LA, USA), L. Schäfer and S.Q. Newton (Fayetteville, USA) . 51

Enhanced structural information on oligosaccharides by scan of linked magnetic and electrostatic fields (B/E) and neutral gas collision fast-atom-bombardment mass spectrometry (FABMS)
V. Kováčk (Bratislava, Czechoslovakia), H.K. Lee and P. Kováč (Bethesda, MD, (USA) . . 61

Synthesis of the C′D′ disaccharide of aureolic acid
R.W. Franck and N. Kaila (New York, NY, USA) 71

The reaction of phenylhydrazine with squaric acid: a model for carbohydrate osazone formation
H.S. El Khadem, M.A. Shalaby (Washington DC, USA), B. Coxon and A.J. Fatiadi (Gaithersberg, MD, USA) 85

Studies of the synthesis of 1,2-*cis*-(cyclic carbamates) of α-D-aldopyranosylamines
J. Kovács, I. Pintér, G. Tóth (Budapest, Hungary), Z. Györgydeák (Debrecen, Hungary) and P. Köll (Oldenburg, Germany) 95

Specificity of mild periodate oxidation of oligosaccharide-alditols: relevance to the analysis of the core-branching pattern of O-linked glycoprotein oligosaccharides
W. Chai, M.S. Stoll, G.C. Cashmore and A.M. Lawson (Harrow, UK) 107

Acetolysis of 2,4-*O*-benzylidene-D-*xylo*-hex-5-enitol derivatives
J. Kuszmann, B. Podányi and L. Párkányi (Budapest, Hungary) 117

Photolysis of 2-azi-2-deoxy-D-*arabino*-hexitol and analogous hexitols; the ineffectiveness of certain carbohydrate diazirines as photoaffinity labels
J. Lehmann and S. Petry (Freiburg, FRG) 133

Chemical interaction between the aglycon and the allyl group of 6-*O*-allylhexopyranoside derivatives
R.J. Ferrier, D.W. Hall and P.M. Petersen (Wellington, New Zealand) 143

A chemoenzymic synthesis of 1,5-dideoxy-1,5-imino-L-mannitol and -L-rhamnitol and investigation of their effects on glycosidases
P. Zhou, H.M. Salleh, P.C.M. Chan, G. Lajoie, J.F. Honek, P.T.C. Nambiar and O.P. Ward (Waterloo, ON, Canada) 155

Rapid production of a panel of blood group A-active oligosaccharides using chemically synthesized di- and tri-saccharide primers and an easily prepared porcine (1 → 3)-α-*N*-acetyl-D-galactosaminyltransferase
C.A. Compston, C. Condon, H.R. Hanna and M.A. Mazid (Edmonton, AB, Canada) 167

Reaction of mono- and oligo-saccharides with keto or ethylenic enol ethers as a route to functionalized acetals and monomers for polymerization
C. Fayet and J. Gelas (Aubière, France) 177

Complexes of cobalt(III) with D-glucosamine and amines
S. Bunel, C. Ibarra, E. Moraga, V. Calvo (Santiago, Chile), A. Blaskó and C.A. Bunton (Santa Barbara, CA, USA) 185

An improved synthesis of 4-azido-4-deoxy- and 4-amino-4-deoxy-α,α-trehalose and their epimers
R.W. Bassily, R.I. El-Sokkary, B.A. Silwanis (Alexandria, Egypt), A.S. Nematalla (Alamed, CA, USA) and M.A. Nashed (Alexandria, Egypt) 197

Structural characterisation of the exopolysaccharide produced by *Lactobacillus delbrückii* subspecies *bulgaricus* rr grown in skimmed milk
M. Gruter, B.R. Leeflang (Utrecht, Netherlands), J. Kuiper (Vlaardingen, Netherlands), J.P. Kamerling and J.F.G. Vliegenthart (Utrecht, Netherlands) 209

Preparation and crystallization of D-glucosamine oligosaccharides with dp 6–8
E. Muraki, F. Yaku and H. Kojima (Osaka, Japan) 227

Notes

Separation of hyaluronan oligosaccharides by the use of anion-exchange HPLC
S. Holmbeck and L. Lerner (Madison, WI, USA) 239

Crystal and molecular structure of α-D-ribopyranosylamine 1,3-(cyclic carbamate)
P. Köll, J. Kovács (Oldenburg, Germany), D. Abeln and J. Kopf (Hamburg, Germany) ... 245

Visualisation of the geometries of objects fabricated from calcium alginate, using magnetic resonance imaging
K. Potter, N.J. Herrod, T.A. Carpenter and L.D. Hall (Cambridge, UK) 249

Structural studies of *Melicocca bijuga* gum exudate
G.L. de Pinto, S. Alvarez, M. Martínez (Maracaibo, Venezuela), A. Rojas and E. Leal (Caracas Venezuela) 257

Synthesis of an intermediate fragment of the capsular polysaccharides of *Klebsiella* type 8
D.-Y. He, Z.-J. Li and M.-S. Cai (Beijing, China) 267

Synthesis of 3-amino-3-deoxy-5-thio-D-allose and 3-amino-3-deoxy-1,2-*O*:5,6-*S*,*O*-di-isopropylidene- 5-thio-α-D-glucofuranose
N.A.L. Al-Masoudi and N.J. Tooma (Basrah, Iraq) 273

5- and 4-(D-lyxofuranosyl)pyrazoles: a new type of pyrazole *C*-nucleoside
M. Gómez-Guillén and J.M.L. Simon (Seville, Spain) 279

Synthesis of β-estradiol β-D-xylopyranosides, primers of heparan sulfate in Chinese hamster ovary cells
F.N. Lugemwa and J.D. Esko (Birmingham, AL, USA) 285

Acetylative desulfation of a glucose-6-sulfate: An oxygen isotope labelling study
J.A. Hyatt (Kingsport, TN, USA) 291

Synthesis of methyl 3-*O*-(2-*O*-methyl-α-L-fucopyranosyl)-α-L-rhamnopyranoside, methyl 3-*O*-α-L-rhamnopyranosyl-α-D-glucopyranoside, and methyl 3-*O*-[3-*O*-(2-*O*-methyl-α-L-fucopyranosyl)-α-L-rhamnopyranosyl]-α-L-rhamnopyranoside: di- and tri-saccharide segments of a lipo-oligosaccharide (LOS-1) of *Mycobacterium szulgai*
M.K. Gurjar and P.S. Mainkar (Hyderabad, India) 297

A simple synthesis of 6-deoxy-D-(6-^{2}H)glucopyranose
D.H.G. Crout, J.R. Hanrahan and D.W. Hutchinson (Coventry, UK) 305

Synthesis of 1,3-dideoxy-3-fluoronojirimycin
C.-K. Lee, H. Jiang, L.L. Koh and Y. Xu (Kent Ridge, Singapore) 309

p-Benzoquinone as precursor for the synthesis of modified D- and L-hexoses: Preparation of 2-acetamido-2,4-dideoxy-D- and L-*xylo*-hexopyranose
J. Lehmann and A. Moritz (Freiburg, Germany) 317

Characterization of the polysaccharide antigen of *Klebsiella pneumoniae* O:9 lipopolysaccharide
L.L. MacLean (Ottawa, ON, Canada), C. Whitfield (Guelph, ON, Canada) and M.B. Perry (Ottawa, ON, Canada) 325

An enzyme-linked immunosorbent assay for blood-group A and B enzymes
S. Yazawa, T. Nakajima, N. Kameyama (Maebashi, Japan), K.-I. Saga (Hyogo, Japan) and T. Tachikawa (Tokushima, Japan) 329

Announcement C1

Author index C3

Subject index C5

Contents C9